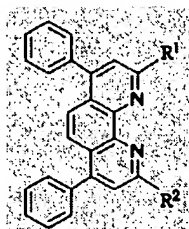


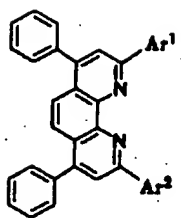
11. (New) A bathophenanthroline compound of formula (I):



wherein  $R^1$  and  $R^2$  are derived from  $R^1\text{-Li}$  and  $R^2\text{-Li}$  respectively, and may be the same or different and independently represent a hydrocarbon group provided that at least one of  $R^1$  and  $R^2$  has at least two carbons; and wherein  $R^1$  and  $R^2$  are selected from the group consisting of an ethyl group, an n-propyl group, an isopropyl group, an n-pentyl group, an iso-pentyl group, a neopentyl group, a tert-pentyl group, a cyclopentyl group, a methycyclopentyl group, a dimethycyclopentyl group, a trimethycyclopentyl group, a tetramethycyclopentyl group, an n-hexyl group, a 2-ethylbutyl group, a 3,3-dimethylbutyl group, a cyclohexyl group, an n-cyclohexylmethyl group, an n,n-dimethycyclohexyl group, an n,n,n-trimethycyclohexyl group, a tert-octyl group, a 2-ethylheptyl group, an n-nonyl group, an n-decyl group, an n-dodecyl group, an n-tetradecyl group, and an n-hexadecyl group, ~~wherein  $n \geq 0$~~  a benzyl group, a phenethyl group, an  $\alpha$ -methylbenzyl group, an  $\alpha,\alpha$ -dimethylbenzyl group, a 1-naphthylmethyl group, a 2-naphthylmethyl group, a furfuryl group, a 2-methylbenzyl group, a 3-methylbenzyl group, a 4-methylbenzyl group, a 4-ethylbenzyl group, a 4-isopropylbenzyl group, a 4-tert-butylbenzyl group, a 4-n-hexylbenzyl group, a 4-nonylbenzyl group, and a 3,4-dimethylbenzyl group.

12. Cancel.

13. (New) A bathophenanthroline compound adapted to be used as an organic layer having a luminescent region provided between an anode and a cathode, wherein the organic layer comprises a bathophenanthroline compound of formula (II):



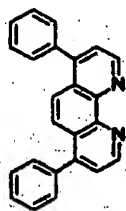
wherein  $\text{Ar}^1$  and  $\text{Ar}^2$  may be the same or different and independently represent an aryl group but do not form an interlocking macrocyclic compound.

14. (New) The bathophenanthroline compound according to claim 13 wherein  ~~$\text{R}^1$  and  $\text{R}^2$~~   $\text{Ar}^1$  and  $\text{Ar}^2$  are selected from the group consisting of a 1-naphthyl group, a 2-anthryl group, a 9-anthryl group, a 2-fluorenyl group, a 4-quinolyl group, a pyridyl group, a 3-pyridynyl group, a 2-pyridynyl group, a 3-furyl group, a 2-furyl group, a 3-thienyl group, a 2-oxazolyl group, a 2-thiazolyl group, a 2-benzoxazolyl group, a 2-benzothiazolyl group, a 2-benzoimidazolyl group, a 4-methyphenyl group, a 3-methyphenyl group, a 2-methyphenyl group, a n,n-dimethyphenyl group, a n,n,n-trimethyphenyl group, a n-ethyphenyl group, a n,n-diethyphenyl group, a n,n,n-triethyphenyl group, a 4-n-propylphenyl group, a n-isopropylphenyl group, a 4-n-butylphenyl group, a 4-isobutylphenyl group, a 4-sec-butylphenyl group, a n-tert-butylphenyl group, ~~wherein~~  $n \geq 0$ .

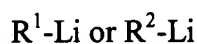
15. Cancel.

16. (New) A process, comprising:

(a) obtaining ~~subjecting~~ a bathophenanthroline of formula (IV)



(b) subjecting the bathophenanthroline to nucleophilic substitution reaction at the 2, 9 positions by a lithium compound of formula (III):

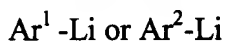


wherein  $R^1$  and  $R^2$  may be the same or different and independently represent a hydrocarbon group provided that at least one of  $R^1$  and  $R^2$  has at least two carbon atoms, and  $R^1$  reacts at the 2 position and  $R^2$  reacts at the 9 position of the bathophenanthroline.

17. (New) The process according to Claim 16, wherein a carbanion is generated from the lithium compound in a solution and reacted with the bathophenanthroline during the nucleophilic substitution reaction.

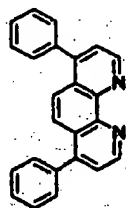
18. (New) A process, comprising:

(a) obtaining ~~subjecting~~ a lithium compound of formula (V):



wherein  $Ar^1$  and  $Ar^2$  may be the same or different and independently represent an aryl group,

(b) subjecting the lithium compound to a bathophenanthroline of formula (IV):



via nucleophilic substitution reaction at the 2, 9 positions of the bathophenanthroline where  $A^1$  reacts at the 2 position and  $A^2$  reacts at the 9 position of the bathophenanthroline.